REMARKS

Claims 1-5, 7-9, and 12-20 remain pending in this application. Reconsideration of this application is requested.

The present invention is directed to an imaging module for a still image capturing device such as a digital camera, wherein an electronic imaging sensor device is coupled with an electronic shutter device to provide selectable exposure patterns for image capture. According to another aspect of the invention, each addressable pixel unit of the imaging module includes a first polarizing shutter element of a first polarization orientation, and a second polarizing shutter element of a second polarization orientation orthogonal to the first orientation, such that light from an object being imaged passes through both shutter elements onto a pixel of the imaging sensor, thereby providing a substantially non-polarized image.

The 35 U.S.C § 102 Rejection

The rejection of claims 1, 2, 5, 8, 10, 13, 16 and 17 under 35 U.S.C. § 102(b) as being anticipated by Barrett et al. (U.S. Patent No. 6,005,990) ("Barrett"), is respectfully traversed. Barrett discloses a scanning apparatus that uses an LCD display screen (such as the display screen of a laptop computer) as an optical scanning cursor to scan a document into a storage medium. Barrett teaches that a predetermined sized contiguous grouping of pixels of the LCD display screen is electronically caused to be transparent, while the remainder of the display screen is caused to be opaque. This group of pixels thus forms a transparent region called a "scanning cursor." According to Barrett, the scanning cursor includes as few pixels as possible, in order to provide the highest resolution document image scan possible. See col. 6, l. 66 – col. 7, l. 11.

Contrary to the present invention as set forth in claims 1 and 16, Barrett does not relate to a still image capturing device. An image capturing device captures an entire image of an object at once, while a document scanner sequentially scans a document either pixel-by-pixel or line-by-line. In particular, Barrett fails to disclose use or storage of a plurality of selectable shutter exposure patterns, which are selectable by a user to control exposure of the imaging sensor to light from the object being imaged. Barrett teaches the opposite of the present invention in that the scanning cursor consists of the

smallest number of pixels possible, and such cursor is repeatedly and systematically moved over the entire LCD display screen to obtain a highest-possible resolution image scan. It is emphasized that even for the rectangular sensor array of Fig. 5, Barrett teaches reliance on the opaqueness of the un-activated pixels of the LCD display screen to prevent light from reaching any photosensors other than those beneath the scanning cursor. See col. 7, l. 62 – col. 8, l. 2.

Accordingly, reconsideration and withdrawal of this ground of rejection is requested.

The 35 U.S.C § 103 Rejection

The rejection of claims 3, 4, 6, 7, 9, 11, 12, 14, 15 and 18-20 under 35 U.S.C. § 103 as being unpatentable over Barrett in view of Brennesholtz (U.S. Patent No. 6,280,034) also is respectfully traversed.

Brennesholtz relates to an image projector, which is relevant to neither an image capturing device as disclosed and claimed in the present application, or to an image scanner, as disclosed by Barrett. Applicants thus take exception to the implication in the Office action that "the field of endeavor of image projection" is analogous to image capturing or to document scanning.[1] In fact such fields are diametrically opposed, in that the former reconstitutes image data into an observable image, while the latter break down an image into elemental data values for storage in a medium.

Fig. 7 of Brennesholtz shows an image projection system that utilizes a *polarizing* color shutter 82 to illuminate LCD imaging panels 86, 89. The LCD panels generate different color image patterns that are illuminated by the light from illumination source 81 and combined by beam splitters 85, 87 and 88 into projection lens 90. This configuration is wholly irrelevant to the imaging module shown in Fig. 2 of the application, which is claimed in claim 3. The function and purpose of the shutter configuration set forth in claim 3 is to provide a substantially non-polarized image by combining polarized light from orthogonally oriented LCD shutter elements to overcome the polarizing nature of the LCD shutter element. In contrast, Brennesholtz utilizes the

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1 It is noted that the Office action does not even allege that the field of endeavor of Brennesholtz is analogous to those of Barrett or of the present invention, and consequently it is submitted that a *prima facie* case of obviousness has not been established on the record.

polarizing feature of the shutter 82 in order to provide polarized light to the LCD imaging panels for subsequent combination in the projection lens.

Thus, it would make no sense for one skilled in the art to seek to modify the Barrett optical cursor LCD scanner to use a polarizing configuration as disclosed by Brennesholtz. The LCD panels of Brennesholtz are used to generate color images, while the LCD display screen of Barrett is used to scan an image of a document.

Conclusion

In view of the foregoing, claims 1-5, 7-9 and 12-20 are submitted to be patentable over the prior art of record, whether considered individually or in combination. Further reconsideration of this application, withdrawal of the outstanding grounds of rejection and the issuance of a Notice of Allowance are earnestly solicited.

Please charge any fee or credit any overpayment pursuant to 37 CFR 1.16 or 1.17 to Deposit Account No. 08-2025.

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